

channels may be an integer other than 4.

As described above, according to the present invention, in the state where transmission start is prohibited until packet data relating to one call is generated and in the case where the data is generated, a first wireless station sequentially starts data transmission while postponing it by a predetermined time in a unit of a data channel. Accordingly, as compared with the case where data transmission is started with respect to all data channels at the same time, abrupt increase of transmission power can be suppressed.

Thus, abrupt increase of interference power can be suppressed. Accordingly, another first wireless station different from the first wireless station can make the increase of the transmission power on the basis of an instruction from a second wireless station while following the increase of the interference power. Thus, deterioration of transmission quality between the first wireless station and the second wireless station can be prevented. Thus, a highly reliable CDMA mobile communication system can be constructed.

Besides, in the state where transmission continues until packet data relating to one call disappears and in the case where the data disappears, the first wireless station sequentially stops the data transmission at timings shifted by a predetermined time in a unit of a data channel. Accordingly,

as compared with the case where the data transmission is stopped with respect to all data channels at the same time, abrupt decrease of transmission power can be suppressed.

Thus, abrupt decrease of interference power can be prevented. Accordingly, another first wireless station different from the first wireless station can make the decrease of the transmission power on the basis of the instruction from the second wireless station while following the decrease of the interference power. Thus, wasteful power consumption of the first wireless station can be prevented.

Further, in the case where data transmission is started on the basis of an amount of data to be transmitted, not a predetermined time, since the data transmission is not started unless the data amount exceeds a transmission start threshold value, the number of data channels to be used is restricted in the case where the data amount is small. Accordingly, in the case where the data amount is small, abrupt increase of transmission power can be suppressed as compared with the case where all data channels are used.

Furthermore, in the case where data transmission is started only when the state, in which an amount of data to be transmitted is not smaller than a transmission start threshold value, is kept throughout a transmission start time, erroneous control due to an abrupt noise or the like can be prevented.

Further, in the case where data transmission is stopped

on the basis of an amount of data to be transmitted, not a predetermined time, since the use of data channels is stopped during the data transmission, not after disappearance of the data, the abrupt drop of the transmission power can be more effectively suppressed than the case where the use of the data channels is first stopped after the disappearance of the data.

Furthermore, in the case where data transmission is stopped only when the state, in which the amount of data to be transmitted is not larger than a transmission stop threshold value, is kept throughout a transmission stop time, erroneous control due to an abrupt noise or the like can be prevented.

Further, in the case where the number of data channels in which transmission start or transmission stop is performed at the same time can be set to one or plural, transmission power control suitable for a transmission environment can be realized.

INDUSTRIAL APPLICABILITY

As described above, in the CDMA (Code Division Multiple Access) mobile communication system, the CDMA mobile communication station applied to this CDMA mobile communication system, and the CDMA packet transmission method according to the present invention, the multicode transmission, the closed loop transmission power control, and the DTX (Discontinuous Transmission) control are applied.